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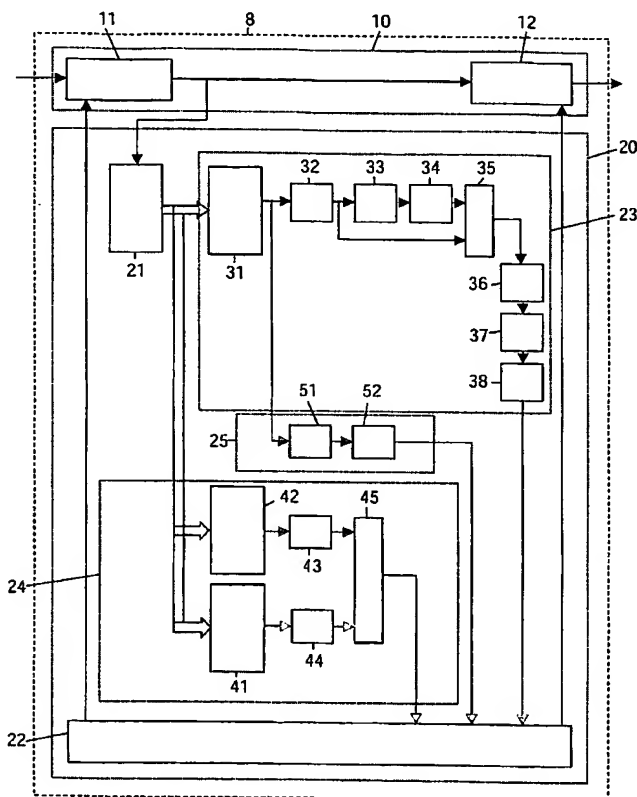
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(54) Title: METHOD AND APPARATUS FOR COARSE AND FINE FREQUENCY AND TIMING SYNCHRONISATION



(57) Abstract: Receivers (1) for receiving frequency signals are, to improve their time synchronisation accuracy, provided with synchronisation stages (20) for performing a coarse time synchronisation through autocorrelating samples of a group of preamble symbols (t1,t2,t3) and a fine time synchronisation through crosscorrelating samples of a further group of preamble symbols (t10,G1) with predefined samples. The synchronisation stages (20) also perform a coarse and a fine frequency synchronisation through detecting and accumulating phases of samples of a yet further group of preamble symbols (t8,t9) and of another group of preamble symbols (T1,T2). The synchronisation stages (20) have buffering units (21) and controlling units (22) for controlling mixing units (11) and transforming units (12) in processing stages (10). The preamble symbols have ten short preamble symbols (t1-t10), a guard interval preamble symbol (G 1) and two training symbols (T 1,T2).

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